

Serial No.: 10/803,765
Docket No.: 26223-10

Art Unit: 2813
Examiner: Thanhha Pham

LISTING OF CLAIMS

1. (Original) A method of electrolessly depositing a metal on at least a part of the surface of a silicon wafer substrate, comprising:
 - (a) contacting the silicon wafer substrate with a solution comprising non-precious metal ions so as to obtain a wafer substrate covered with non-precious metal ions; and
 - (b) exposing the wafer substrate obtained in step (a) to a reducing solution comprising a reducing agent for reducing the metal ions that cover said substrate to a lower oxidation state.
2. (Original) The method according to claim 1, further comprising the step of:
 - (c) contacting the wafer substrate obtained in step (b) with an electroless copper plating solution.
3. (Original) The method according to claim 1, wherein at least one of steps (a) and (b) is carried out by puddle processing.
4. (Original) The method according to claim 2, wherein at least one of steps (a), (b) and (c) is carried out by puddle processing.
5. (Original) The method according to claim 1, wherein said reducing agent used in step (b) comprises a borane reducing agent.
6. (Original) The method according to claim 1, wherein said reducing solution used in step (b) comprises at least one metal ion of group Ib of the periodic table.
7. (Original) The method according to claim 2, wherein said deposited metal is copper.
8. (Original) The method according to claim 1, wherein the wafer substrate is scanned with a laser following step (b).

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9. (Original) The method according to claim 2 further comprising during or after step (b), selectively scanning the wafer substrate with laser radiation in a predetermined manner.

10. (Original) The method according to claim 2 further comprising during or after step (c), selectively scanning the wafer substrate with laser radiation in a predetermined manner.

11. (Original) A method for forming a copper pattern on a silicon wafer substrate comprising (a) contacting the silicon wafer substrate with a solution comprising non-precious metal ions so as to obtain a wafer substrate covered with non-precious metal ions; (b) exposing the wafer substrate obtained in step (a) to a reducing solution comprising a reducing agent for reducing the metal ions that cover said substrate to a lower oxidation state; and (c) contacting the wafer substrate obtained in step (b) with an electroless copper plating solution.

12. (Original) The method according to claim 11, further comprising during or after step (b), selectively scanning the wafer substrate with laser radiation in a predetermined manner.

13. (Original) The method according to claim 11, further comprising during or after step (c), selectively scanning the wafer substrate with laser radiation in a predetermined manner.

14-21 (Cancelled)